CLAIMS

We Claim:

1   1. A method for constructing a decision support system comprising the

2   following steps:

3   (a) identifying an investment decision;

4   (b) identifying potential investments;

5   (c) utilizing domain experts to identify needed information to evaluate

6   each investment;

7   (d) using domain experts to identify how to calculate investment risks;

8   and,

9   (e) constructing a Bayesian network based on information obtained in

10   steps (a) through (d) .

1   2. A method as in claim 1 additionally comprising the following step:

2   (f) using domain experts to identify how to calculate reliability of

3   information obtained in step (c).

1   3. A method as in claim 1 additionally comprising the following step:

2   (f) using domain experts to identify how to calculate transaction costs

3   for investments.

1   4. A method as in claim 1 wherein step (c) includes the following

2   substep:

3   (c.1) using domain experts to identify pertinent information to obtain

4   about an investor in order to perform the investment decision.

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1   5. A method as in claim 1 wherein step (c) includes the following

2   substep:

3   (c.1) using domain experts to identify pertinent information to obtain

4   about an investor in order to perform the investment decision, the pertinent

5   information including at least one of the following:

6   investment time horizon,

7   risk toleration,

8   desired return,

9   available capital.

1   6. A method as in claim 1 wherein in step (b) identifying potential

2   investments comprises the following substeps:

3   (b.1) identifying investment types; and,

4   (b.2) identifying particular investments with the investment types.

1   7. A decision support system for supporting investment decisions

2   comprising:

3   a decision support engine; and,

4   a Bayesian network traversed by the decision support engine, the

5   Bayesian network comprising:

6   an investment decision node identifying an investment decision,

7   potential investment nodes identifying potential investments,

8   and

9   information nodes identifying information to be obtained, the

10   information to be obtained being matched to potential investments, wherein

11   reliability of the information is estimated.

1   8. A decision support system as in claim 7 additionally comprising:

2   a knowledge acquisition tool for building the Bayesian network.

1   9. A decision support system as in claim 7 wherein the information to

2   be obtained includes additional information about the potential investments

3   to be obtained from a database.

1   10. A decision support system as in claim 7 wherein the information to

2   be obtained includes additional information to be obtained from a potential

3   investor.

1   11. A decision support system as in claim 7 wherein the information to

2   be obtained includes additional information to be obtained from a potential

3   investor, including at least one of the following:

4   investment time horizon;

5   risk toleration;

6   desired return;

7   available capital.

1   12. A decision support system for supporting investment decisions

2   comprising:

3   a decision support engine; and,

4   a Bayesian network traversed by the decision support engine, the

5 Bayesian network comprising:

6   an investment issue node identifying an investment issue,

7   investment type nodes identifying investment types,

8   investment nodes identifying investments available within

9 investment types, and

10   information nodes identifying information to be obtained, the

11 information to be obtained being matched to investment nodes, wherein

12 reliability of the information is estimated.

1   13. A decision support system as in claim 12 additionally comprising:

2   a knowledge acquisition tool for building the Bayesian network.

1   14. A decision support system as in claim 12 wherein the information

2 to be obtained includes additional information about the investments to be

3 obtained from a database.

1   15. A decision support system as in claim 12 wherein the information

2 to be obtained includes additional information to be obtained from a potential

3 investor.

1   16. A decision support system as in claim 12 wherein the information

2 to be obtained includes additional information to be obtained from a potential

3 investor, including at least one of the following:

4	investment time horizon;
5	risk toleration;
6	desired return;
7	available capital.